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SURVEY OF MOUNTAIN PINE BEETLE INFESTATION ON THE CABINET NATIONAL FOREST 1948

by
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SUBJECT—

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SURVEY OF MOUNTAIN PINE BEETLE INFESTATION

ON THE CABINET NATIONAL FOREST

1948

By A. L. Gibson

In response to reports indicating infestations of the mountain pine beetle, a number of areas were examined on the Cabinet National Forest in 1948. En route to examine a reported infestation near Baldy Mountain at the head of Cedar and Corona Creeks, the writer observed mountain-pine-beetle-infested lodgepole pine on the Thompson River south of Bend Ranger Station. On the latter area enough trees were observed and examined to indicate that an outbreak was present and that a potentially decided increase could be expected in 1949 from the numerous brood present in the infested trees.

Another drainage, Twelve-mile Creek, was examined and found to have only a few western white pine attacked by the mountain pine beetle. More comprehensive discussions of conditions on various units is given in the following pages.

Corona - Cedar Creek Area

An area in Section 30, Township 22 north, Range 25 west at the headwaters of the Corona-Cedar Creek drainages was reported as supporting an outbreak of the mountain pine beetle in lodgepole pine. This infestation the writer was unable to locate.

Twelve-mile Creek Unit

Strip run in this unit revealed only one spot of infestation. This was on Twelve-mile Creek, 45 chains south of the Trapper Creek sign. Eighteen mountain-pine-beetle-infested trees were found in this group, twelve of them western white pine, one lodgepole pine, and five Engelmann spruce. Five of these trees were between the creek and the road, the remainder across and about one chain west of the creek. Heavy emergence has occurred from two of the white pine but some callow adults are still present. The other white pine harbor a heavy brood. Brood in the one infested lodgepole pine is medium in numbers, that in the Engelmann spruce contains brood of the Engelmann spruce beetle as well as of the mountain pine beetle.

Although no other infestation was observed, there is probably more. It is estimated that there are between 25 and 30 infested trees on the entire unit. Data for the unit is as follows:

Twelve-mile Creek Unit	Acreage 2,000
Acreage of sample	39.4
Infested trees on unit	25-30

Proximity of the group of 18 trees to the road makes them readily accessible for either treatment or salvage. Their generally large size and fine quality may make their salvage profitable.

Thompson River Unit

Following the discovery of the infestation on this drainage, a second trip was made into the area to secure some idea of the extent of the outbreak. Based on the information obtained from these two examinations a survey of the area was added to late season plans. This survey was conducted as planned from October 26 to November 6, except that deepening snow decreased the amount of examination that could be made of stands on the higher slopes and of those well back from the river.

The outbreak was found to extend even into stands where lodgepole pine was but a minor part of the stand composition and into comparatively isolated patches of timber. Such a large area is involved that only a general idea of the boundaries and intensity of the infestation could be gained in the time available. In addition there were numerous back areas which were not examined which may decidedly increase the infested area.

The limited data obtained on the survey indicates approximately 35,000 acres are infested. Of this area only about 6,000 acres is within national forest boundaries and much of that is of non-federal ownership.

Roughly, the entire area concerned can be divided into two units, the northern one of about 25,000 acres containing an estimated 16,000 trees and the southern of about 10,000 acres with 3,500 trees. Ownership of the infested areas is divided between the state, Northern Pacific Railroad, Anaconda Copper Company and other private owners.

In 1948, and for a number of years prior to that time, there has been logging over much of the area south of the Bend Ranger Station. Ponderosa pine, larch, and Douglas fir have been the species removed in greatest volume. Comparatively little lodgepole pine has been cut. Infestation is present not only in these

cut-over stands but in areas where no logging has been done.

It should be pointed out at this time that broods in attacked trees are heavy and give every indication of a decided increase in 1949. This outbreak seems but part of a general build-up of mountain pine beetle infestation in lodgepole pine in this general region.

The necessity of a more detailed survey of this unit is obvious. Not only do we need more representative data of the known infested areas, but also to know the limits of the outbreak. This may require much "back area" examination. Inspection of the forest from a plane in late July would probably show where localized outbreaks are building up. However, extensive ground checking would be necessary to determine the presence of trees attacked in the 1949 season. Some of the "back area" inspection might well be done prior to the flight and attack period of the mountain pine beetle in 1949.

A few infested lodgepole pine containing heavy brood were noted about 2½ miles north of McGregor Peak. This area is one of those needing careful scouting for evidence of a developing outbreak.